

FOUR VALVE PER CYLINDER ENGINE HEAD

ABSTRACT

An improved head assembly replacement for the Harley Davidson Motorcycle engine **20** adapted to utilize four valves per cylinder using push rods **50** without modification to the engine block, and maintaining the existing location and configuration for the mounting of the normal intake and exhaust systems. The standard rocker arms actuate the new dual intake and exhaust valves through a yoke **54** bridging each pair of valves. The exhaust valve and intake valve pairs are inclined at an included angle of 50 to 70 degrees in the plane of the engine crankshaft. The pushrods **50** remain in the standard position and the self-adjusting hydraulic tappets are retained.